The purpose of these guidelines is to promote the health and wellness of the pregnant student assigned to a healthcare setting or laboratory course. While various situations such as blood borne pathogen exposure exists in the day-to-day healthcare environment for all students, these guidelines were adopted with the knowledge that certain conditions, illnesses, or disease entities may create special concerns for the pregnant student and/or the embryo/fetus. Students who have confirmed pregnancy, are contemplating pregnancy, or suspect that they may be pregnant may all benefit from these guidelines as certain exposures and situations are more critical in the first trimester. Minimal research exists to guide clinical decision in this setting. These guidelines are based on Title I of the Americans with Disabilities Act (ADA) (https://www.upcounsel.com/ada-pregnancy) The University of Michigan-Flint advises that you should discuss any concerns you may have with your healthcare provider immediately upon receiving confirmation of your pregnancy or if you suspect that you may be pregnant. Your healthcare provider may recommend specific activities or situations that should be avoided during pregnancy.

The guidelines are intended to:

1. Assist students in reducing the risk of exposure to communicable or hazardous agents that may adversely affect a developing embryo/fetus.

2. Decrease the likelihood of inadvertent exposures to hazardous agents or trauma that may adversely affect you and/or your developing embryo/fetus.

Not all listed conditions require the same amount of concern during your pregnancy. Some may be of more concern early in the pregnancy while other conditions may be more significant during the second or third trimester of your pregnancy. Some situations impact only the embryo/fetus while others may affect both the mother and the embryo/fetus.

**With few exceptions, there is no evidence to support extreme work restrictions during pregnancy. Healthy pregnant women may work until delivery if the work environmental hazards are no greater than daily life.**

General recommendations:

1. We recommend that you notify the Program Director or designee of your pregnancy as soon as possible. This notification is voluntary and is only requested to support the health and safety of you and your embryo/fetus; and make appropriate accommodations in consultation with your healthcare provider and occupational health experts as needed.
The program does not discriminate against pregnant students and will comply with all applicable laws.

2. Please use the following resources related to pregnancy:
   a. Dynamed search engine (found in alpha index of library resources) using the following search phrase for current research: Employment-Related Concerns in Pregnancy
   b. The Centers for Disease Control (CDC) and The National Institute for Occupational Safety and Health (NIOSH) provide access to multiple documents and sites related to reproductive health and hazards. [http://www.cdc.gov/niosh/topics/repro/](http://www.cdc.gov/niosh/topics/repro/)

3. The following guidelines are recommended for consideration during pregnancy:
   a. Standard universal precautions and transmission-based precautions should be incorporated into your patient care as this is advised for all healthcare professionals.
   b. Avoiding strenuous work and prolonged standing and toxic exposures seems prudent according to evidence-based research.
   c. Avoidance of potentially toxic chemicals. Students may notify the biology department with concerns about participation in a teaching lab while they are pregnant. The student will be provided with a letter from the Supervisor of Science Laboratories. The letter will explain the types of activities in the teaching lab in question and chemical(s) involved. The student will be directed to take the letter and any provided Material Safety Data Sheets (MSDS) to her physician so that the physician can assess any potential risk to the student and her pregnancy.
   d. The risk of transmission of the particular infectious diseases should be discussed with your healthcare provider. If these diseases are acquired during pregnancy, adverse effects on the embryo/fetus may occur. Immune titers may be drawn at the time you meet with your healthcare provider if immunity is unknown for hepatitis B, rubella, and varicella.
   e. Review all Safety Data Sheets (SDS) in the area you are assigned to become familiar with any reproductive hazards used in your assigned healthcare setting or laboratory course. If you are concerned about reproductive hazards, consult your healthcare provider.

4. In an effort to reduce the potential risks, pregnant students will not be required to provide care/treatment for patients with the following:
   a. Communicable infectious diseases (known or suspected) unless you are known to be immune: Measles (Rubeola), Parvovirus B19 (Fifths’ Disease), Rubella (German Measles), Varicella-Zoster (Chickenpox, Shingles), Ebola.
   b. Receiving chemotherapeutic agents or other agents which are known or suspected to have carcinogenic, mutagenic, or teratogenic properties through exposure. You will also not be required to participate in the preparation of such agents.
c. Environmental exposures that involve aerosol treatments with antibiotic/antiviral medications, ethylene oxide, or waste gases, i.e., nitrous oxide. In addition, you may be excluded from responsibilities which involve exposure to potentially high levels of radiation.

5. Radiology/Radiation Oncology/Nuclear Medicine Experience/Operating Room/Special Procedures

a. Students assigned to these departments will adhere to federal and state guidelines for radiation safety during pregnancy. Other measures to decrease the likelihood of inadvertent exposures during pregnancy will be taken including:

i. Pregnant students are encouraged to voluntarily notify the Program Director or designee of their status. All female students will be asked to sign a Notice of Pregnancy form that explains the effects of ionizing radiation during pregnancy in a radiation-emitting area.

ii. Pregnant students who provide notification of their status will be provided an in-service on all radiation safety precautions by the Radiation Safety Officer at the assigned rotation. The student will receive a copy of the NRC Regulation 8.13 which includes “The Pregnant Worker’s Guide” and will be asked to sign documentation stating she has received a copy of this regulation and understands the hazards involved.

iii. Pregnant students will be allowed to work in the fluoroscopy and operating rooms but are not required to be in the room during the fluoroscopy procedure

iv. For radiation oncology, effective January 1, 1994, the Nuclear Regulatory Commission (NRC) implemented a revised set of federal regulations for the Standards for Protection Against Radiation, primarily the Dose to an Embryo/Fetus. In this section, a new term, "Declared Pregnant Woman," has been added. The definition of "Declared Pregnant Woman" means that she has **voluntarily** informed the Program Director and Radiation Safety Officer (at each site) **in writing** of her pregnancy and the estimated date of conception.

A. **Key points regarding Declared Pregnant Workers are:**
   1. Despite any appearance to the contrary, a female student is not pregnant until **she declares** herself pregnant **in writing**.

   2. The woman may undeclare her pregnancy at any time.
3. If the student's dose is 450 millirem or below at the time of declaration, then the licensee must ensure that the dose to the worker does not exceed 500 millirem over the course of gestation.

4. Once declared, the licensee must make efforts to avoid substantial variation in the monthly exposure rate.

5. **Written withdrawal of declaration**

6. A declared pregnant woman may voluntarily inform the Program Director and Radiation Safety Officer (at each site) in writing to revoke her declaration of pregnancy at any time for any reason. This can be done whether or not the pregnancy has concluded.

7. The revocation terminates any previous restrictions on work being performed with radioactive materials or other sources of ionizing radiation, for the sole purpose of ensuring compliance with the embryo/fetal dose limits specified above.

B. **Anesthesia:**
   1. Nurse anesthesia students should refer to the pregnancy policy in their student handbook.

   2. Administration of anesthesia in the operating room environment has innate exposure to a variety of agents. Measures are in place to reduce exposure, but reduction to absolute zero is not feasible. Should a student elect to avoid all exposure to anesthetic waste gases during a pregnancy, she should request a reassignment during operating room or anesthesia assignments.

   3. The United States Department of Labor, Occupational and Safety Health Administration has compiled information related to this subject on the following website: Anesthetic Gases: Guidelines for Workplace Exposures. [http://www.cdc.gov/niosh/docs/2007-151/](http://www.cdc.gov/niosh/docs/2007-151/)

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